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In re Kaplan, et al. (CA FC) 229 USPQ 678 (5/6/1986)

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In re Kaplan, et al.

U.S. Court of Appeals Federal Circuit

229 USPQ 678

Decided May 6, 1986

No. 85-2522

Headnotes

PATENTS

1. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

"Domination," which occurs when one patent has broad or "generic" claim which "reads on" invention defined by another patent's narrower or more specific claim and thus "dominates" latter because more narrowly claimed invention cannot be practiced without infringing upon broader claim, does not, by itself, give rise to double patenting.

2. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

Double patenting rejections, of either "same invention" or "obviousness-type," properly rest on fact that patent has been *issued* and later issuance of second patent will continue protection, beyond date of expiration of first patent, either of very same invention claimed therein, or of mere variation of that invention which would have been obvious to those of ordinary skill in relevant art.

3. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

PTO Board of Patent Appeals and Interferences, in rejecting claims for double patenting, impermissibly used disclosure of applicants' own joint invention as prior art.

Particular patents -- Polyols

Kaplan and Walker, application Serial No. 364,221, Homogeneous Liquid Phase Process for Making Alkane Polyols, rejection affirmed.

Case History and Disposition:

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Appeal from U.S. Patent and Trademark Office Board of Patent Appeals and Interferences.

Application for patent of Leonard Kaplan, and Welling Epler Walker, Serial No. 364,221, filed April 1, 1982. From decision rejecting single claim, applicants appeal. Reversed.

Attorneys:

Steven T. Trinker, Danbury, Conn. (Norman L. Balmer, Danbury, Conn.) for appellant.

Harris A. Pitlick, Arlington, Va., Joseph F. Nakamura, Solicitor, and Fred E. McKelvey, Deputy Solicitor, for Patent and Trademark Office.

Judge:

Before Rich and Nies, Circuit Judges, and Nichols, Senior Circuit Judge.

Opinion Text

Opinion By:

Rich, Circuit Judge.

This appeal is from the decision of the United States Patent and Trademark Office (PTO) Board of Patent Appeals and Interferences (board) rejecting, under 37 CFR 1.196(b), the single claim of appellants' application serial No. 364,221, filed April 1, 1982, entitled "Homogeneous Liquid Phase Process for Making Alkane Polyols," on the sole ground of "double patenting, because it constitutes an improper extension of monopoly for an invention claimed by Kaplan." We reverse.

Background

The Kaplan and Walker application at bar and the cited Kaplan patent, No. 3,944,588, issued Mar. 16, 1976, to one of the appellants

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on an application filed Jan. 2, 1975, are both assigned to Union Carbide Corporation, the real party in interest. As is apparent, the Kaplan patent application was pending only about fourteen and a half months. It was copending with the great-great-grandparent of the application at bar, filed Sept. 30 1975. Its title is "Catalytic Process for Polyhydric Alcohols and Derivatives." The Kaplan patent contains one independent claim and thirteen dependent claims. The claims most relevant here are those incorporated in dependent claim 4, which is the only claim specifically relied on by the board to support its double patenting rejection. They read as follows (emphasis ours):

1. The process of making alkane diols and triols having from 2 to 3 carbon atoms in the molecule which comprises reacting in a homogeneous liquid phase mixture of hydrogen and oxides of carbon in the presence of a rhodium carbonyl complex and a trialkanolamine borate at a pressure of from about 1000 psia to about 50,000 psia correlated with a temperature of about 100°C to about 375°C sufficient to produce said diols and triols.
2. The process of *claim 1* wherein the temperature is from about 150°C to about 300°C.
4. The process of *claim 2* wherein the reaction is effected *in the presence of an organic solvent*.

Among organic solvents disclosed and specifically claimed in the Kaplan patent are two known as "tetraglyme" (in more explicit nomenclature, dimethyl ether of tetraethylene glycol) and sulfolane. Two of the Kaplan dependent claims (10 and 11) individually name these specific solvents, respectively. No claim in Kaplan calls for a solvent *mixture*, which is significant with respect to the double patenting rejection for reasons which will appear. There are, however, a number of *examples* of mixed solvents in Table VI of the Kaplan patent specification, particularly Example 45, upon which the board relied. Example 45 is specific to a mixture of "Tetraglyme/sulfolane (65/10)." The heading of Table VI is "Triisopropanolamine Borate in Mixed Solvents."

Against this much of the background, we now reproduce the single claim on appeal of this *joint* application of Kaplan and Walker which stands rejected for double patenting in view of claim 4 of the Kaplan patent (emphasis ours):

In the homogeneous liquid phase process of producing alkane polyols by the reaction of oxides of carbon and hydrogen in the presence of a rhodium catalyst in which rhodium is complexed with carbon monoxide to provide a rhodium carbonyl complex at a temperature between about 100°C. to about 375°C. and a pressure between about 1000 psia to about 50,000 psia, the improvement which comprises effecting said reaction in a solvent mixture of tetraglyme and sulfolane under conditions whereby such solvent mixture is essentially inert and the rate of formation of such alkane polyol is greater than would be obtained by effecting said reaction under equal conditions using tetraglyme or sulfolane as the solvent.

It will be observed from a comparison of this claim with the Kaplan claims reproduced above that the Kaplan and Walker (joint) claim at bar is, generally speaking, defined as an improvement on the Kaplan (sole) catalytic process of producing alkane polyols (diols and triols) by reacting hydrogen and carbon oxides (e.g., carbon monoxide) in an organic solvent. The reason why the process using the solvent mixture of the appealed claim was not *claimed* in the Kaplan patent, although it is *disclosed* in the patent specification, is that Kaplan alone was not the inventor of that process; it was the *joint* invention of Kaplan and Walker and therefore the application on appeal was filed. The reason it was *disclosed* in Kaplan's patent was that it was part of the "best mode" of practicing Kaplan's catalytic process. See 35 USC 112, first paragraph. ("The specification . . . shall set forth the best mode contemplated by the inventor of carrying out his invention.") By the time Kaplan filed his application he knew of ("contemplated") the Kaplan and Walker improvement on his own sole invention and therefore he disclosed it. It is a given, of course, that a sole inventor and joint inventors including the sole inventor are separate "legal entities," a legal proposition from which certain legal consequences flow, *In re Land and Rogers*, 368 F.2d 866, 879, 151 USPQ 621, 633 (CCPA 1966), 1 "such as who must

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apply for patent." It is worth remembering an axiomatic statement on the same page of the *Land and Rogers* case, which is also applicable here:

When the joint and sole inventions are related, as they are here, inventor A commonly discloses the invention of A & B in the course of describing his sole invention and when he so describes the *invention* of A & B he is not disclosing "prior art" to the A & B invention, even if he has legal status as "another." [the reference to "another" is to that word as used in 35 USC 102(e) and (g).]

Having been filed during the pendency of the Kaplan application, the present Kaplan and Walker application with its single mixture claim had a difficult time in the PTO resulting in the passage of much time. To summarize, there were two appeals to the board prior to the appeal which resulted in the decision now before us. Three continuation applications were filed under 37 CFR 1.60. The last of these, filed Jan. 9, 1981, is the present application and was appealed to the board from the examiner's rejections under §§102(g), 102(a), and 103 based on the Kaplan patent and a patent to Pruett. Declarations under 37 CFR 1.131 were filed by appellants and by Kaplan explaining who invented what and when.

The board reversed all of the examiner's grounds of rejection and entered its own rejection on the ground of double patenting, as stated in the first paragraph hereof, which rejection was adhered to on reconsideration. Applicants sought reconsideration by the board "rather than reopening prosecution as is permitted under 37 C.F.R. 1.196(b)." Appellants then took this appeal. Therefore, this is the first review of the board's new rejection, explicated in its two opinions.

To indicate the reasoning of the board, we quote most of the paragraph of its initial opinion in which it made its new rejection (all emphasis ours):

Under the provisions of 37 CFR 1.196(b), we reject claim 1 [there is no other] on the ground of double patenting, because it constitutes an *improper extension of monopoly* for [sic, of] an invention claimed by Kaplan. . . . [A]t least claim 4 of the Kaplan patent and appellant's claim 1 *embrace* common subject matter. Both claims are generic[2] and both claims *would be infringed* by a process which utilized rhodium and trialkanolamine borate as the catalyst and a *mixed solvent* as the organic solvent. Example 45 of the Kaplan patent clearly shows that the term solvent, as used in Kaplan's claims is intended to *embrace* the mixed solvent of Example 45. Further, appellants' claim 1 is sufficiently broad to *encompass* the use of a trialkanolamine borate in conjunction with the rhodium catalyst. Because both claims *embrace the same subject matter*, allowance of the instant application would amount to "double patenting of the improper extension of monopoly type"* as termed by Judge Almond in *In re Thorington*, 57 CCPA 759 769 418 F.2d 528, 537, 163-USPQ 644, 650 (CCPA 1969).

*We prefer the term "improper extension of monopoly" rather than "obviousness type double patenting" because the improper extension of monopoly occurs as a result of the *same subject matter being claimed*. The rejected claims [sic] before us may well be drafted so broadly as to also embrace subject matter which is unobvious over the Kaplan patent. Nevertheless, for all practical purposes, the rejected claims [sic] serve to extend the monopoly for that subject matter *embraced* by the claims which is the same as that falling within the *embrace* of the Kaplan claims.

The board then discussed *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970), a case on which appellants as well as the PTO rely before us, and continued:

Accordingly, the instant claim, which reads on subject matter disclosed in and *embraced* by the claims of the Kaplan patent, cannot be granted absent filing of a *terminal disclaimer* to prevent undue timewise extension of monopoly.

The imposition of the terminal disclaimer originated with the board in conjunction with its origination of the double patenting rejection. From the dates set forth above, it will be seen that its effect would be to cause any patent issuing on the application at bar to expire on March 16, 1993, the expiration date of the Kaplan patent, assuming a term of 17 years, so that it would have a term of less than 7 years.

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Appellants have refused that option. And, of course, if the board's claim analysis is correct, appellants would gain little or nothing from the patent because the invention of the appealed claim, using the mixed solvents, is already *covered* by the Kaplan patent until the date of its expiration.

Following the filing of what the board characterized as "appellants' well-drafted Request for Reconsideration," of some 20 pages, the board wrote its second opinion, discussing further *In re Vogel* and some other CCPA double patenting opinions, emphasizing the following:

The Kaplan patent deliberately chose to claim the use of organic solvents as a vehicle for carrying out the claimed process . . . The Kaplan patent discloses numerous solvents . . . five of which are solvent mixtures and one of which is the tetraglyme/sulfolane solvent which is claimed by appellant as the essential feature of their process. Surely, the tetraglyme/sulfolane solvent of Table VI *provides some of the support* for the term "organic solvent" as used in claim 4 of the Kaplan patent. [Emphasis ours.]

. . . .

As indicated by the patent, the term "solvent" includes the same mixed solvent claimed by appellants. Being in some aspects the same, the subject of appellants' claims [sic] would have been *prima facie* obvious from the subject matter of the claims in the Kaplan patent. Appellants' evidence of the unexpected results teaches no more than that which is disclosed in the patent and which is properly considered supportive of the claims [sic], i.e., that mixed solvents give superior yields. Appellants' evidence does not overcome the *prima facie* case and a "terminal disclaimer" is necessary. . . .

OPINION

Double Patenting Generally

We reverse the board's double patenting rejection essentially for two reasons: (1) It has confused double patenting with "domination" which, by itself, does not give rise to "double patenting" and (2) it has used the disclosure of appellants' joint invention in the Kaplan patent specification as though it were prior art, which it is not, to support the obviousness aspect of the rejection.

[1] By domination we refer, in accordance with established patent law terminology, to that phenomenon, which grows out of the fact that patents have claims, whereunder one patent has a broad or "generic" claim which "reads on" an invention defined by a narrower or more specific claim in another patent, the former "dominating" the latter because the more narrowly claimed invention cannot be practiced without infringing the broader claim. To use the words of which the board seemed to be enamored, the broader claim "embraces" or "encompasses" the subject matter defined by the narrower claim. In possibly simpler terms, one patent dominates another if a claim of the first patent reads on a device built or process practiced according to the second patent disclosure. This commonplace situation is not, per se, double patenting as the board seemed to think. *In re Sarett*, 327 F.2d 1005, 1014, 1015, 140 USPQ 474, 482, (CCPA 1964). (See particularly the quotations from E. Stringham's *Double Patenting* (1933) about terms such as "covered" and "embraced.")

With respect to the board's concern about "extension of monopoly," the PTO Solicitor's brief, while supporting the board, properly deplors its use of the ambiguous word "monopoly," preferring to use the more accurate and less emotion-generating expression 3 "extension of patent rights," explaining this in a footnote reading:

Both the board in this case and some prior decisions of the CCPA use the term "monopoly" in referring to the rights obtained through the grant of a patent. We prefer to refer to a "patent rights" based on the rationale given by Chief Judge Markey in his article "Why Not the Statute?," 65 J. Pat. Off. Soc'y 331, 331-333 (1983).

See also *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698, n.3 (Fed. Cir. 1983); *Kayton on Patents*, 2d ed., 1-27, "E. Patents: Property Versus Monopoly." Compare, *Robinson on Patents* (1890) Chapt. II §§11-44.

More to the point of the board's concern, however, one must inquire more closely than did the board: extension of what patent right? Any patent granted on the application at bar will have the single claim on appeal which is expressly limited to carrying out the Kaplan process using the specific solvent *mixture* of tetraglyme *and* sulfolane invented by appellants.

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Is this an extension of a patent on Kaplan's invention -- Kaplan who never conceived of using that mixture? When Kaplan's (sole) patent expires, and assuming appellants get their joint patent, the world will still be free to use (so far as these two patents go) the Kaplan process so long as appellants' solvent mixture is not used in it. Of course, it may be that everyone will want to use the improvement, but that is commonly the case when dominating patents expire with improvement patents still outstanding.

In further clarification of the distinction between domination and double patenting as currently understood, we repeat a passage from E. Stringham's *Double Patenting* at 207, previously quoted in *Sarett*:

One of the simplest, clearest, soundest and most essential principles of patent law, is that a later invention may be validly patented, altho [sic] dominated by an earlier patent, whether to the same or to a different inventor. No one will seriously deny the correctness of this statement, in principle. But it is incessantly lost sight of when an actual case must be decided.

"May be validly patented" of course implies that the "later invention" at least complies with the requirements for patentability found in the statute, namely, novelty, utility, and unobviousness as established by evidence of prior art, which a description of the later invention is not. Domination is an irrelevant fact.

The development of the modern understanding of "double patenting" began in the Court of Customs and Patent Appeals (CCPA) about the time of *In re Zickendraht*, 319 F.2d 225, 138 USPQ 22 (CCPA 1963), a rather unusual case is that there was no majority opinion because only two judges joined each of the two principal opinions. Neither *opinion* therein, therefore, can be regarded as controlling precedent in this court. That case is noteworthy primarily for the suggestion in a concurring opinion that the appellant might have disposed of the rejection by filing a terminal disclaimer under 35 USC 253. This suggestion precipitated a steady stream of appeals over the next few years dealing with double patenting and the effectiveness or otherwise of terminal disclaimers which results in revisions of the PTO's rules, guidelines, and Manual of Patent Examining Procedure on the matter. By the time of *In re Vogel*, 1970, the court saw fit to make a restatement of the law of double patenting which serves as a good starting place for deciding this case.

The first question treated in the *Vogel* restatement is whether the *same invention* is being claimed twice. If so, *Vogel* states, 35 USC 101 prevents two patents from issuing. *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). We need not linger over this question as that is not the rejection made by the board here, notwithstanding what it said about what the claims "embrace." 4

The second question, says *Vogel*, is: "Does any claim in the application define merely an obvious variation of an invention disclosed and claimed in the patent? In considering the question, the patent disclosure may not be used as prior art. *In re Boylan*, supra; *In re Aldrich*, 398 F.2d 855, 158 USPQ 311 (CCPA 1968)." The opinion went on to describe, and resolve, some of the logical difficulties in reaching a decision on whether there is or is not what has come to be known consistently as "obviousness-type double patenting," the ground of rejection now before us.

Should there be any doubt about the true ground of rejection before us in view of the board's stated preference for the term "improper extension of monopoly" instead of "obviousness-type double patenting," we observe that the brief of the PTO Solicitor states the issue to be whether the board was correct in rejecting the claim "on the ground of double patenting of the obviousness type." In the summary of argument is the statement: "Claim 4 [of Kaplan] and its supporting disclosure render the subject matter of the appealed claim obvious." In the argument proper, the brief says the main disagreement between appellants and the board "appears to be the interpretation of the so-called 'second analysis question' discussed in *In re Vogel*," and that is the obviousness-type double patenting question, which we quoted above.

We will say a word about the board's desire to depart from the established terminology in the law of double patenting for the reason, quoted earlier, that "the improper extension of monopoly [i.e., of the patent right] occurs as a result of the same subject matter being claimed." The board's first opinion said it was adopting terminology from Judge Almond's opinion in *Thorington*, another CCPA case in

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which the court undertook to restate the law of double patenting. Reading Judge Almond's opinion will show that it recognizes two types of double patenting: same invention type and obviousness type, the main significance of the distinction being that filing a terminal disclaimer is permitted to cure an obviousness type situation but not a same invention type situation. (The fact that the board here demanded a terminal disclaimer as a condition for allowance of the claim is another indication of the true nature of its rejection.) It is also clear from Judge Almond's opinion that he was using "extension of monopoly type" as synonymous with obviousness type, merely as a way of distinguishing from same invention type double patenting.

[2] The main reason why one cannot use "extension of monopoly" as a type designation, however, is that it cannot serve that purpose because the basis for both same invention and obviousness-type double patenting rejections is timewise extension of the patent right. All proper double patenting rejections, of either type, rest on the fact that a patent has been issued and later issuance of a second patent will continue protection, beyond the date of expiration of the first patent, of the very same invention claimed therein (same invention type double patenting) or of a mere variation of that invention which would have been obvious to those of ordinary skill in the relevant art (obviousness-type double patenting). In the latter case, there must be some clear evidence to establish why the variation would have been obvious which can properly qualify as "prior art." Even if obviousness of the variation is predicated on the level of skill in the art, prior art evidence is needed to show what that level of skill was.

Obvious Variation of what Kaplan Claims

We turn now to consideration of the obviousness aspect of this obviousness-type double patenting rejection, which had to be based, of course, on what is *claimed* in the Kaplan patent. The board relied on Kaplan claim 4, which depends from claim 2, which depends from claim 1. These claims are set forth above. The board relied on the fact that claim 4 calls for "an organic solvent." The board did not say that the use of appellants' "solvent mixture of tetraglyme and sulfolane" would be obvious from claim 4. Indeed, in that portion of the board's opinion in which it reversed all of the examiner's rejections, the board held, on the record which contains appellants' declarations, that they, not Kaplan, invented the use of those mixed solvents, that appellants had antedated Kaplan as a reference under 35 USC 102(e), that the Kaplan patent cannot be used to show obviousness under §103, and that appellants' claim was not obvious from a cited patent to Pruett et al. It also reversed a rejection under §§102(g)/103 for obviousness which used Kaplan as the sole basis. Then it turned about and made an obviousness-type double patenting rejection based on Kaplan's claim 4. This rejection was predicated on the novel argument, particularly set out in the board's second opinion on rehearing, that Example 45 in Kaplan (which is *appellants' invention*, disclosed in Kaplan's patent to conform with the best mode requirement of §112) "provides some of the support for the term 'organic solvent' as used in claim 4 of the Kaplan patent."

[3] Thus, after concluding that the Kaplan patent is not available to show obviousness of appellants' claimed process, the board has nevertheless used Kaplan to show obviousness in a double patenting context, for it relied on no other reference. Moreover, that part of the Kaplan disclosure used to do this is a description of appellants' joint invention. The board's claim-support theory does not suffice to justify this anomalous result. There is adequate support for the "organic solvent" limitation in claim 4 apart from appellants' specific mixed solvent invention, including the disclosure of the separate solvents in the mixture which are separately claimed by Kaplan. There is no way the board could have found appellants' claimed invention to be an obvious variation of what Kaplan claims except by treating the Kaplan patent disclosure as though it were prior art. This has repeatedly been held in our precedents to be impermissible. *In re Vogel*; *In re Aldrich*; *In re Boylan*, all *supra*. In effect, what the board did was to use a disclosure of appellants' own joint invention which had been incorporated in the Kaplan sole disclosure to show that their invention was but an obvious variation of Kaplan's claimed invention. That amounts to using an applicant's invention disclosure, which is not a 1-year time bar, as prior art against him. That is impermissible. *D. Chisum, Patents* §3.08[2], §5.03[3][f].

The PTO brief argues that *Vogel* sanctions such use of Kaplan's disclosure. We disagree. We do not find the factual situation here comparable to that in *Vogel*; neither was the reasoning of the board underlying the *Vogel* rejection comparable to the claim-supporting theory of the board in this case. Each double patenting rejection has to be decided on its own facts. *Vogel* dealt with one difficult-to-analyze situation, this case presents a different one.

Summary

The double patenting rejection of appellants' single claim is *reversed* because the same

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invention is not being claimed, and because there is no proper evidence to show that the claim is for a mere obvious variation of what is claimed in the Kaplan patent relied on to support the rejection. There being no double patenting, the requirement for a terminal disclaimer was improper.

REVERSED

Footnotes

Footnote 1. All applications involved in this case were filed and the Kaplan patent had issued before amendment of 35 USC 116 by P.L. 98-622 of Nov. 8, 1984, sec. 104(a), 98 Stat. 3384, now paragraph one of 35 USC 116, which reads:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each make the required oath, except as otherwise provided in this title. Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent.

The first sentence is the substance of the law at the times involved in this case. The second sentence is the liberalization added by the 1984 amendment, which, had it been available, might have obviated the problem in this case.

Footnote 2. Just what the board meant by saying "both claims are generic" is not clear to us. The claims speak for themselves. Kaplan's claim 4 defines the solvent used in the process, which is the limitation under discussion by the board, as "an organic solvent." Appellants' claim on appeal defines the solvent as "a solvent mixture of tetraglyme and sulfolane." Far from being "generic," the latter looks very much like a quite specific species of the genus "organic solvent."

Footnote 3. The difficulty is that "monopoly" is used in different senses in patent and antitrust law, hence its ambiguity. Because of its antitrust connotations and association with illegality in connection therewith, it often evokes negative reactions inappropriate to a dispassionate analysis of patent law problems. See *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 723 F.2d 1350, 1367, 220 USPQ 763, 776 (Fed. Cir. 1984).

Footnote 4. For the latest decision of this court on the "same invention" double patenting issue see *Studiengesellschaft Kohle mbH v. Northern Petro-chemical Co.*, 784 F.2d 351, 228 USPQ 837 (Fed. Cir. 1986), a case in which it was expressly held that "obviousness-type double patenting is not involved in this case." The opinion may be of interest, however, for what it has to say about "domination" and delay in the issuance of a second patent due to proceedings in the PTO. 784 F.2d at 355, 228 USPQ at 841.

- End of Case -